WHAT IS CLAIMED IS:

1. An electro-optical device, comprising:

a first substrate having a plurality of pixel electrodes;

a second substrate having an opposing electrode facing the pixel electrodes; and

an electro-optical material interposed between the first substrate and the second substrate,

the electro-optical material between adjacent pixel electrodes being driven by mutually opposite polarity having a thickness less than a thickness of the electro-optical material between adjacent pixel electrodes being driven by same polarity.

2. The electro-optical device according to claim 1, further comprising:

a thickness D of the electro-optical material formed in a transmissive area in relation to the pixel electrode; and

a spacing W formed between the adjacent pixel electrodes being driven by mutually opposite polarity;

the adjacent pixel electrodes arranged to have a relationship of $0.5D<W$.

3. The electro-optical device according to claim 1, further comprising:

a spacing W formed between the adjacent pixel electrodes being driven by mutually opposite polarity;

a thickness d of the electro-optical material between one of the adjacent pixel electrodes being driven by mutually opposite polarity and the opposing electrode;

the spacing being nearly equal to the thickness d.

4. The electro-optical device according to claim 1,

the first substrate comprising a plurality of data lines, a plurality of scanning lines intersecting the data lines, a plurality of thin film transistors provided in corresponding to the plurality of data lines and the plurality of scanning lines.

5. The electro-optical device according to claim 4,

the first substrate including:

a plurality of projections formed in a position corresponding to a spacing between the adjacent pixel electrodes which are driven by mutually opposite polarity.

6. The electro-optical device according to claim 5,

further comprising:

a plurality of capacitor lines being formed along the scanning lines,

the projections being formed in an area where the scanning line and the capacitor line are formed.

7. The electro-optical device according to claim 4,

the second substrate including a plurality of projections formed in a position corresponding to a spacing between the adjacent pixel electrodes which are driven by mutually opposite polarity.

8. The electro-optical device according to claim 1,

the electro-material being a vertically aligned liquid crystal.

9. A projector, comprising:

a light valve including the electro-optical device according to claim 1; and

a projection optical system.